

## DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION

## **EROSION & SEDIMENT CONTROL NOTES**

These "Erosion & Sediment Control Notes" are intended to be used on all Public Works plans for both private development and public right-of-way improvements. The notes are comprehensive and should be applied according to site-specific conditions.

- 1. <u>Filtered Runoff</u>. All runoff shall be filtered prior to discharging from a site or to any type of private or public storm water conveyance system (natural watercourses, streets, gutters, concrete-lined v-ditches, storm drains, flow-lines, inlets, outlets, etc.). All non-permitted discharges are prohibited from entering any storm water conveyance system year-round.
- 2. Best Management Practices (BMP's). Year-round, pollution prevention measures, also known as Best Management Practices (BMP's), must be installed prior to any field activities. BMP handbooks can be downloaded at <a href="https://www.cabmphandbooks.com">www.cabmphandbooks.com</a>. Additional erosion prevention and sediment control (ESC) measures must be installed and maintained prior to and throughout each rainy season. The developer/contractor is responsible for ESC measures throughout the duration of the project for all clearing, disking, grading, excavating and stockpiling activities, and on all exposed slopes and inactive pads throughout the entire site. The developer/contractor is also responsible for any discharges from subcontractors.
  - a. <u>Stockpiling of BMPs</u>. Additional ESC materials shall be stockpiled at various locations throughout the site for immediate use within seven days prior to any forecast rain. On emergency situations, the developer/contractor shall immediately make equipment and workers available to protect the site.
- 3. <u>Erosion and Sediment Controls</u>. All ESC measures shall be inspected, restored, repaired or modified year-round throughout the site to protect perimeters, adjacent properties, environmentally sensitive areas and all private/public storm water conveyance systems. If any erosion or sediment controls fail during any rain event, more effective ones will be required in their place.
  - a. <u>Erosion Controls</u>. Erosion controls shall include, but are not limited to applying and establishing: vegetative cover, wood mulch, stapled or pinned blankets (straw, coconut or other), plastic sheeting (minimum 10-mil), polypropylene mats, spray-on controls to all disturbed areas or other measures approved by the City Engineer. Jute netting shall not be used as a stand-alone erosion control. For slopes greater than 4:1, provide fiber rolls and either a bonded fiber matrix product applied to a rate of 3500 lb/acre or a stabilized fiber matrix product applied to a rate of 10 gal/acre. The City Engineer may approve different application rates for slopes less than 4:1.
  - b. <u>Sediment Controls</u>. Sediment controls shall include, but are not limited to: desilting basins, graded berms, fiber rolls, silt fences, gravel bag chevrons (filled with minimum ¾" gravel), check dams, drainage inlet protection, etc. Fiber rolls shall be installed in 15-foot increments measured along the face of the slope. Silt fence shall be installed along interior streets and combined with gravel-bag or silt fence chevrons inside the sidewalk right-of-way or back of curbs.

- 4. State Construction General Permit. If the project disturbs, exposes or stockpiles one acre or more of soil, the site must be covered under the State Construction General Permit. A Waste Discharge Identification (WDID) Number, a risk level determination number and the Qualified "Storm Water Pollution Prevention Plan" (SWPPP) Developer (QSD) shall be provided to the City prior to issuance of a grading permit. A SWPPP shall be implemented throughout the duration of the project and shall be readily available to City and State inspectors and updated to reflect current site conditions during construction. The construction permit can be downloaded at: <a href="https://www.waterboards.ca.gov/water-issues/programs/stormwater/construction">www.waterboards.ca.gov/water-issues/programs/stormwater/construction</a>.
- 5. <u>Perimeter Protection</u>. Perimeter protection must be installed prior to any clearing activities. Clearing shall be limited to areas that will be immediately graded or disturbed. A combination of ESC measures shall be implemented in areas that have been cleared. All disturbed areas of an inactive site, as described in the Engineering and Construction Manual, shall also be protected.
- 6. Construction Access Points. Construction access points shall be stabilized with a combination of rock and shaker plates year-round to prevent track-out. Interior access points (all proposed driveways, material storage and staging area entrances/exits, etc.) shall also be protected with rock to prevent track-out onto interior streets. Routine street sweeping shall be performed on all paved streets where tracking is observed. Vacuum sweepers shall be used when street sweeping becomes ineffective. Controlled street washing shall only be allowed prior to the application of asphalt seal coats, and only when all pertinent drainage inlets are protected.
- Desilting Basins. Desilting basins shall be designed according to the guidance provided in CASQA's
  construction BMP handbook. Impounded water shall be secured from the public. Signage indicating
  "Ponded Water Do Not Enter," or an equivalent warning notice, shall be posted.
- 8. <u>Material Storage</u>. Material storage and staging areas shall be established. Fuel tanks, portable toilets, liquids, gels, powders, landscape materials and stockpiles of soil shall be stored away from all private/public storm water conveyance systems, sidewalks, right-of-ways and flow-lines and shall have secondary containment. Inactive stockpiles of soil shall be covered at all times. Active stockpiles shall be covered prior to a forecast rain.
- 9. <u>Construction Waste</u>. Construction waste and miscellaneous debris shall be placed in water-tight bins. Wire mesh receptacles shall not be allowed. Wash-out stations shall be provided for concrete, paints, stucco and other liquid waste, and shall be lined with plastic and located away from public right-of-ways, flow lines, etc. Prior to any forecast rain, bins and wash-outs shall be covered with lids or plastic tarps.
- 10. <u>Slope Protection</u>. Storm water runoff shall not be directed over slopes without permanent down drains installed. ESC measures are required on all exposed slopes until sufficient/permanent landscape is established. There shall be 100% slope protection in place prior to issuance of certificate of occupancy.
- 11. <u>Portable Mixers</u>. All portable mixers shall have plastic liners underneath them with gravel-bags placed on the down-hill side of the liners to contain discharges.
- 12. <u>Maintenance</u>. All onsite and offsite flow lines (i.e., v- and brow-ditches, terrace drains, ribbon gutters, curb gutters, etc.), storm water conveyance systems, check dams, chevrons, silt fences and desilting basins shall be free of sediment, construction materials, waste, miscellaneous debris and deteriorated ESC measures *year-round*.
- 13. <u>Obstructions</u>. No obstructions, other than BMP's, shall be allowed within any storm water conveyance system, unless alternative drainage facilities have been approved by the City Engineer.
- 14. Other Construction Notes. Refer to separate notes for "general," "grading" and "paving" requirements.